

A NEW *ARENARIA* FROM ALASKA

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AMONG the interesting plants brought to the Gray Herbarium by Robert H. Bates of the Bradford Washburn Mt. Crillon Expedition (Alaska) was an *Arenaria* which apparently has not been heretofore recorded. This new species of *Arenaria* was collected by Bates at an elevation of 5800 ft., on Mt. Crillon, an altitude above which no vascular plants were observed.

A study of the material from Mt. Crillon indicates that the Alaskan plant is more closely related to *Arenaria sajanensis* Willd. than to any other of the North American species of the section *Alsine* to which our plant belongs. In the size of floral parts and the relative length of the mature fruiting capsule to the calyx, the Alaskan plant agrees with *A. sajanensis*. My plant differs from the latter, however, in having seeds which bear scale-like or short, flat cilia, since in *A. sajanensis* the seeds are naked and unappendaged. Moreover, the leaves, and often the sepals as well, of the Alaskan *Arenaria* are spiny-ciliate whereas in *A. sajanensis* these stiff cilia are lacking. In this character of spiny-ciliate leaves and sepals, my plant is closely related to the European *A. imbricata* Marsch. Bieb. This European plant differs from mine, however, in the following respects: leaves longer, much narrower, linear to lance-ovate, subacute to acuminate, usually tipped with a spine and not as prominently trinervate; cilia of the leaves finer, usually short and inconspicuous; sepals not usually prominently trinervate, and lacking the coarse cilia of the Alaskan plant; peduncles longer and more glandular-hispid. In the size of flowers, the length of fruiting capsule and the characters of the seeds, the two plants appear very nearly similar. In habit, the Alaskan plant closely simulates the European *A. Cherleria* (Peterm.) Ard.; but, in the absence of the long foliar cilia, the glabrous pedicels and calyces, the smaller flowers (2.5–3 mm. as against 6 mm. of the Alaskan plant), and the very small eciliate seeds, the Old World plant is distinctly separated.

Accordingly, the Mt. Crillon plant may be diagnosed as follows:

ARENARIA crilloniana, sp. nov. Planta acaulescens vel sub-aculescens, dense cespitosa; foliis plus minusve imbricatis, brevibus, 1–5 mm. longis, coriaceis, plerumque manifeste trinervatis, anguste lanceolato-ovatis, obtusis vel subacutis, marginibus longe ciliatis: ciliis 1–5 cellulatis plerumque 0.5–1.5 mm. longis; floribus circa 6 mm. longis; pedicellis brevissimis, glanduloso-pubescentibus (2–5 mm.

longis); petalis albis vel purpurantibus, leviter emarginatis, 5–5.5 mm. longis, obovato-spathulatis, sepala aequantibus vel superantibus; sepalis 5, manifeste trinervatis, exigue glanduloso-pubescentibus, lanceolato-ovatis, marginibus plus minusve ciliatis, apice obtusis vel rotundatis; staminibus 10; stylis 3, brevibus separatis; capsula sepala paullo superanti, maturitate tripartita; seminibus reniformi-orbiculatis 0.5–0.75 mm. latis, marginibus breviter ciliolatis.

Plants acaulescent to subacaulescent, densely caespitose, with more or less imbricated leaves: leaves short, (1–5 mm. long), thick, more or less coriaceous, usually prominently trinervate, narrowly lance-ovate, obtuse to subacute, with long-ciliate, serrulate margins: cilia 1–5 celled, mostly 0.5–1.5 mm. long; flowers approximately 6 mm. long, on very short glandular-pubescent pedicels (2–5 mm. long): petals white to purplish, slightly if at all notched, 5–5.5 mm. long, obovate-spatulate, equalling or sometimes slightly exceeding the sepals: sepals 5, green, prominently trinervate, very sparsely glandular-pubescent, lance-ovate, more or less ciliate on the margins, obtuse to rounded at the apices; stamens 10, included; styles 3, short, separate; capsules slightly exceeding the sepals, splitting into 3 segments at maturity, each valve barely notched at the apex; seeds reniform-orbicular, 0.5–0.75 mm. in diameter, with short-ciliate margins.—Known only from the type station on Mt. Crillon. ALASKA: along sides of ridge, 5800 ft., Mt. Crillon, July 14–16, 1933, *Robert H. Bates* (TYPE in the Gray Herbarium).

GRAY HERBARIUM.

NOTES ON ROCKY MOUNTAIN PLANTS.—ARTEMISIA PATTERSONI Gray, var. **glabrior**, var. nov., bracteis foliisque subglabris.—COLORADO: Mt. Evans, alt. 12–13,000 ft., August 23, 1934. *L. and E. H. Kelso* 105 (TYPE, in my collection). NEW MEXICO: Baldy Peak, Colfax County, above timberline, alt. about 3,600 meters, September 4, 1916, *Standley* 14,360; Baldy, August 14, 1910, *Wooton*.

Bracts and leaves glabrate.

Typical *A. Pattersoni* from Gray's Peak, Colorado, is smaller, and with bracts and leaves densely tomentose. *A. Pattersoni* has not been previously recorded from New Mexico. Wooton and Standley in their Flora of New Mexico combined it with *A. scopulorum*. *A. Pattersoni* is distinct in always having the corollas glabrous.

ARTEMISIA SCOPULORUM Gray, var. **aggregata**, var. nov., capitulis dense aggregatis.—COLORADO: Mt. Evans, alt. 13,000 ft., August 23, 1934. *L. and E. H. Kelso* 104 (TYPE, in my collection).

Heads aggregated in a subcapitate cluster at the top of the stem.

In typical *A. scopulorum* the heads are racemosely or spicately disposed along the stem no matter how dwarfed the plant may be.